CPSY 540 Applied Developmental Neuropsychology
SUMMER 2012

Thursday: May 10 – June 28 & Saturday, June 16, 2012
Thursday: 5:15-8:30 pm

Faculty: Colleen M. Hanson, Ed.D.
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Office Hours: Thursday afternoons: *By appointment only*

Text(s):
1. How The Brain Learns. D. Sousa (2006) **(Optional)**
2. Acquired Brain Injury: From Hospital to School & Beyond. C.M. Hanson & M.E. Colwell (2001). **(Required)****

**** Purchased in first class ($20)**

Course Description:

This course offers the student a conceptual overview of the field of Neuropsychology from both developmental and applied perspectives. During this course students will explore theories and principles of Neuropsychology and their relationship to practice in school and mental health settings. Students will have a basic understanding of brain anatomy and function and the effect a variety of diseases and conditions have on the developing brain. Also covered will be how these various conditions manifest themselves in the educational setting in the areas of learning and memory and what services might be available to students with acquired brain and other neurodevelopmental injuries under the IDEA (Individuals with Disabilities Education Act). 2 semester hours; prerequisites: CPSY 541, 542, 543).

Professional Standards:

Students are expected to follow professional standards, including adherence to legalities and ethics. In addition, students need to show a respectful demeanor towards students, parents, professional peers, and others. Students need to be timely in completing work: they must honor class attendance and hours. Department policy is that students may miss ***one*** class each semester, with appropriate make-up work. If two classes are missed, the student is in danger of failing the class. If students miss a class, they need to discuss ***required*** make-up work with the instructor. Students are expected to use appropriate professional tools, including technological tools, as needed and appropriate. Students are expected to be aware of and respect diversity and multicultural issues.

Students with Special Needs:

The **Student Support Services Office**, located in the **Templeton Student Center** (main campus), is a resource for students with disabilities. A variety of services are available through this office according to the particular needs of each student. Students interested in these services may contact the **Student Services Office** at **503-768-7191**. This contact is the necessary first step for receiving appropriate accommodations and support services. Please inform me, if you need accommodations in our class.

Goals & Objectives:

At the completion of this course, each student will:

- Have a conceptual framework of Neuropsychology and its implications for school and mental health settings
  [NASP Domains: 2.4 (Socialization and Development of Life Skills) & 2.7 Prevention, Crisis Intervention, & Mental Health)
- Have a basic understanding of normal and abnormal neurodevelopment from birth through adulthood
  [NASP Domains: 2.4 & 2.5 (Student Diversity in Development and Learning)
- Have a basic knowledge of the anatomy and functions of the brain
  [NASP Domains: 2.1 (Data-Based Decision Making & Accountability)
- Gain an overview of psychopharmacology as it relates to the brain and is applied in practice
  [NASP Domains 2.7]
- Become familiar with the neurological and educational aspects/implications of a variety of medical conditions of the brain, such as:

  1. Fetal Alcohol Syndrome
  2. Substance Abuse & other toxic products (inhalants, etc.)
  3. Strokes & other vascular accidents
  4. Attentional Disorders
  5. Seizure Disorders (epilepsy)
  6. Tumors of the brain
  7. Cerebral Palsy
  8. Shaken Baby (Sudden Impact, Shaken Impact) Syndrome
  9. Pharmacology
  10. Concussions & Comas
  11. Post-Traumatic Stress Disorder
  12. Learning Disabilities/Dyslexia
  13. Acquired Brain Injuries

  [NASP Domains: 2.1;2.3 (Effective Instruction and Development of Cognitive /Academic Skills) & 2.4]

- Build on their current knowledge of assessment and assessment tools and how they relate to memory and learning, behavior and brain dysfunction. Examples of instruments would be:
  1. WISC-IV

2. WJIII-Cog
3. DAS-II

[NASP Domains: 2.1, 2.4 & 2.5]

- Be introduced to a selection of neuropsychological assessment tools and understand their role in the assessment and identification of memory, learning, and brain dysfunction.

- Examples of instruments would be:

1. Children's Memory Scale (CMS)
2. Wechsler Memory Scale – Third Edition (WMS-III)
3. Developmental Assessment of Neurological Functions-2 (NEPSY-2)
4. Wide Range Assessment of Memory and Learning-2 (WRAMAL-2)
5. Behavior Rating Inventory of Executive Functions (BRIEF)

[NASP Domains 2.1 & 2.5]

Students will:

1. **Prepare a 5 to 6 page research paper on one of the medical conditions of the brain listed above (or one of their choosing – permission of instructor required) and make a formal class presentation.** Each research paper will:

    a. Have cited references (at least 4) – format to be discussed in class
    b. Be presented in class with group discussion (10 min.)
    c. Be available (via email) for cohort. A 2 page summary will be distributed to the class at the time of presentation
    d. Include a discussion of:
        i. Structures of the brain involved
        ii. Symptoms
        iii. Prevalence in the population
        iv. Educational implications
        v. Possible educational accommodations
        vi. Vocational/social implications
        vii. Implications at various developmental stages
        viii. Prognosis

NOTE: Summary, tables, outlines, graphs, drawings, and references are **in addition** to the **5-6 page**s

2. **Prepare a reaction papers on the following article (2-3 pages)**

1. Fertile Minds (Time Magazine/February, 1997)

3. Complete the Take-Home Final

Grades:

Research Paper	**=**	**30%**
Topic Presentation	**=**	**10%**
Article Reaction	**=**	**10%**
Take-Home Final	**=**	**50%**
TOTAL	**=**	**100%**

Grade Distribution:

98-100	**=**	**A+**	
93-97	**=**	**A**	
90-92	**=**	**A-**	
87-89	**=**	**B+**	
83-86	**=**	**B**	
80-82	**=**	**B-**	**…etc., etc., etc. …**

NON-DISCRIMINATION POLICY AND SPECIAL ASSISTANCE

Lewis and Clark College adheres to a nondiscriminatory policy with respect to employment, enrollment, and program. The College does not discriminate on the basis of race, color, creed, religion, sex, national origin, age, handicap or disability, sexual orientation, or marital status and has a firm commitment to promote the letter and spirit of all equal opportunity and civil rights. If you need course adaptations or accommodations because of a disability (see section Students with Special Needs) and/or you have a emergency medical information to share please make an appointment with the instructor as soon as possible.

CALENDAR

Colleen M. Hanson, Ed.D.
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May 10th (Class 1)

1. Overview of Course, Review of Syllabus, Selection of Research Topic
2. Discussion of Take-Home Final
3. Hand Outs, Text & Reading Assignments
4. Acquired Brain Injuries
5. IDEA Eligibilities & Acquired Brain Injuries

May 17th (Class 2)

1. Early Theorists and the Brain
2. Brain Development
3. Normal Development in the Young Child
4. **Read: Hanson pgs 1-38**

May 24th (Class 3)

1. Structures of the Brain
2. Traumatic Brain Injuries
3. Video: Faces of Brain Injury
4. **Read: Hanson pgs 38-43; Sousa Handout; Basic Brain Facts; Hanson Handout: TBI**

May 31st (Class 4)

1. Cognitive Sequelae & Educational Implications following Brain Injuries
2. Comparing & Contrasting ABI with other IDEA Disability Categories

June 7th (Class 5)

1. Memory and Student Learning
2. **Read: Sousa Handout: Memory, Retention & Learning**
3. **Article Reflection (Fertile Minds): DUE**

June 14th (Class 6)

1. Evaluating Memory & Learning
2. Neuropsychological Implications of the "Big 3" (Part 1): WISC-IV

June 16th (Class 7) SATURDAY

Please bring something to share for breakfast. I'll bring juice & coffee.

1. ***All* Research "Topic" Presentations/Discussions** *(with 2 pg. handout for cohort & me)*
2. Neuropsychological Implications of the "BIG 3" (Part 2): DAS-2 & WJIII**2**

June 21st (Class 8)

1. Executive Functions and Learning
2. How to use/write Neuropsych info in the Psychoeducational Report & in Consultation
3. **Read: Hanson pgs 43-74 to end; Handout: Executive Functioning**

June 28th (Class 9) LAST CLASS

Please bring a salad or something to share & I'll bring Pizza/Drinks

1. Overview: Test Instruments for School-Based Neuropsychology
2. Developing Accommodations, Modifications & Recommendations
3. **TAKE-HOME FINAL due**
4. **Course Evaluations due**
5. ***All* Research Papers due**